

and other factors that are both internal and external to the immediate patient-physician relationship." Dembe hypothesizes that twelve social factors are particularly important in determining the recognition and construction of occupationally related diseases. These factors are: the advent of new technologies, the establishment of mechanisms for financial or workers' compensation, labor activism, economic instability, public fears of heightened risk of morbidity and mortality, gender and cultural stereotyping, the self-interest of medical specialties, media attention and marketing efforts, war, the action of political parties and politicians, and the economic consequences of reimbursing for the disorder. Dembe tests the role of these hypothetical determinants through historical case studies of three occupational diseases which, "despite their extremely high incidence,...have not previously received the same level of scholarly analysis as have occupational illnesses related to chemical exposure." These studies, which constitute the heart of the book, are of cumulative trauma disorders of the hands and wrists (carpal tunnel syndrome in par-

ticular), back pain, and noise induced hearing loss. The book concludes with a summary and analysis of findings across the case studies and with the policy implications that Dembe draws from his results.

**26. The Cost of Birth Defects: Estimates of the Value of Prevention**, N. J. Waitzman, R. M. Scheffler, P. S. Romano. Birth defects constitute the leading cause of death in infants in the United States. Most babies born with defects do not die, however, and many receive considerable medical, habilitative and educational services throughout life. Such defects are also associated with considerable productivity losses. This study estimates that the eighteen most clinically significant birth defects together cost the US approximately eight billion dollars annually. Despite the defects' profound effects, the authors found that "a surprisingly limited amount of research has attempted to measure the economic costs of birth defects in the aggregate or individually." Using eleven major data sources, including the California Birth Defects Moni-

toring Program, "one of the most extensive active surveillance programs in the world," the volume offers data on the separate and aggregate social costs of the eighteen birth defects and provides the basis for evaluating the application of cost-benefit and cost-effectiveness analysis to prevention strategies. After an introductory overview, the authors describe how cost-of-illness methodology can be applied to the subject of birth defects and define the cost estimation formulas used in their research. Chapter 3 presents the incidence, prevalence, and survival rates for this investigation. In the next chapter, the authors demonstrate their method of estimating direct medical costs and the results they obtained. The following two chapters estimate the nonmedical direct costs and the indirect costs of birth defects. Chapter 7 provides a cost-benefit analysis of the use of folate supplementation to prevent neural tube defects and offers an estimate of the total costs of birth defects in the US. The volume ends with two appendixes, one describing each of the study's eighteen birth defects and the other its major sources of data.

## REVIEW

### **Review: *World Mental Health: Problems and Priorities in Low-Income Countries***

Robert Desjarlais, Leon Eisenberg, Byron Good, and Arthur Kleinman. New York, NY, Oxford University Press; 1995.

Journalistic and professional discussions of health in developing countries often center on communicable diseases, either the ancient scourges of cholera and malaria or the new viral plagues of hanta, ebola, and human immunodeficiency virus (HIV). Psychological distress and frank psychiatric disorders, which are typically insidious in onset and less visible than many communicable diseases, have proven less newsworthy. As a consequence, these conditions are not accorded the attention they warrant given their pervasive presence in human societies and the toll they take in human suffering, compromised development, and social and economic dysfunction. *World Mental Health: Problems and Priorities in Low Income Countries* should serve as a correc-

tive to these prevailing misconceptions. (The first author is a professor of anthropology at Sarah Lawrence College, the latter three, all members of the Harvard Program in Social Medicine.)

This book has four central intellectual goals. The first is to describe the major forms of mental disorder requiring attention either because of severity (e.g., suicide, schizophrenia), substantial prevalence (e.g., depressive disorders, anxiety disorders including posttraumatic stress disorder) or epidemic rise (substance abuse). The clinical phenomenology, course, prognosis, and treatment of each condition are ably summarized. Throughout the text, the authors artfully integrate their training in Western psychiatric principles and practice with their orientation and experience in medical anthropology. On the one hand, they acknowledge the efficacy of psychopharmacology in the treatment of depressive and anxiety disorders. Yet they also emphasize that many forms of subjective suffering eluding capture by the numerical categories of the

ICD-10 nonetheless warrant substantial public health concern and investment.

The second goal is to convey the size, scope, and personal and social cost of these conditions. Where the epidemiologic evidence seems to permit, the authors quantify burden in the form of prevalence rates. Elsewhere they utilize qualitative ethnographic accounts of local circumstances to convey the magnitude of mental health problems. The economic costs associated with mental illness are underscored by referencing the 1993 World Bank estimate that mental health problems (including self-inflicted injuries) account for approximately 15% of the global burden of disease as measured by disability-adjusted life years. By comparison, cancer accounts for 5.8%, heart disease, 4.4%, and malaria, 2.6%.

The third aim is to underline the biological and social origins of mental and behavioral disorders. With an exposition adroitly driven by theory and telling examples of regional efforts at prevention or care, the authors stress the important contribution of social and cultural factors

in the distribution, burden, course, and prognosis of mental disorders and psychological distress. Accordingly, the authors argue that efforts at prevention, intervention, and treatment must take place on several conceptual and organizational levels. Nonetheless, while giving due attention to social context, the authors disavow the popular cant that social factors are the sole or always the primary cause of mental disorders. They also dismiss any suggestions that developing societies harbor psychiatric Edens.

The fourth goal is to delineate how diverse behaviors, such as smoking, diet, personal hygiene, and sexual practices, influence risk of physical illness and, in turn, psychological distress. By definition, health behaviors also help to determine who seeks medical care, who complies with protracted treatment regimens, for example, for tuberculosis and leprosy, and hence who recovers from conditions that are not self-limiting. The authors note that preventive public health measures should target these specific behaviors as well as the social, cultural, and political forces that craft, instigate, and promote them. For public health professionals and students, whose lodestone is prevention, these third and fourth themes are the most central.

A book on international mental health might have been content to structure the exposition around the major clinical psychiatric entities, with some attention to disorders especially salient for certain demographic subgroups, e.g., women, children, and the elderly. Consistent with their theoretical stance, however, the authors ensure that equal attention is given to external factors that endanger psychological well-being, namely, natural and human-made disasters, political oppression, civil war, refugee status, and violence.

The chapter on violence draws attention to the pervasive presence of collective violence in many countries in Asia, Africa, and Latin America in the latter half of the 20th century. In these settings, civilians have become intentional targets rather than the accidental casualties of political violence, ethnic strife, and low-intensity warfare. The chapters on women and children also devote extensive space to the appalling level of violence directed against these groups. The authors reiterate the need for protection, care, and treatment of victims of violence. However, on the question of treatment, they exhibit their customary avoidance of dogma by questioning, for example, the widely assumed

therapeutic efficacy of Western "talking" cures for reducing symptoms of posttraumatic stress. They note that in some settings—refugee camps following a genocidal civil war—such treatment approaches may be both clinically and politically inadvisable.

The book's fifth and final aim is not to provoke thought so much as to prompt informed action. The two concluding chapters outline the types of initiatives in mental health services, public health interventions, developments in public policy developments, and research requiring urgent attention. Among specific recommendations, the authors list upgrading the quality of mental health services and mental health training in low-income countries, coordinated efforts to improve state gender policies, and broad initiatives to address the causes and sequelae of communal and interpersonal violence. In addition, the authors underline the need both to conduct research and to strengthen research capabilities through educational programs. They rightly lament the absence of directories of innovative prevention and treatment initiatives, and the lack of research centers and of training in international mental health. For academically trained mental health researchers working in this area, these observations will come as a welcome public recognition of the paucity of road maps, standard lines of communication, databases, and easily identified and accessed professional networks for advancing these initiatives.

The book is an organizational jewel. The opening paragraphs of each chapter generally orient the reader to the problem at hand, followed by a review of relevant social, anthropological, epidemiological, and economic or clinical information. This material is enlivened by boxed inserts detailing concrete examples of local health crises or indigenous solutions to health care problems. Some of these materials, in particular, a verbatim telephone conversation introducing murder as a desired sequel to child sexual abuse, are unbearably chilling. Readers also will find an extensive bibliography that signposts many of the major reference works and published and unpublished documents in clinical and cross-cultural psychiatry, psychiatric epidemiology, medical anthropology, demography, and economics. Equally useful are appendices listing the names, affiliations, and areas of expertise of the 100 advisory board members, consultants, and additional expert readers for the volume.

Yet the news is not all good. A book on health in human populations should begin with a cogent account of the basic measures, concepts, and inferential principles of epidemiology. Grasp of these essentials permits methodological rigor in evaluating evidence from the health sciences, and a programmatic integration of epidemiologic concepts and findings into the analyses. This book falls substantially short of these expectations. Incidence and prevalence, benchmark indices in epidemiology, are nowhere defined in the text and, on occasion, are used incorrectly. Incidence is, of course, most relevant for efforts at primary prevention and should guide broad public health programs and policy. Prevalence deals with disease burden and, thus, is intimately tied to planning of health programs and health facilities, and to choice of secondary and tertiary prevention and treatment efforts. Proper understanding and appreciation of risk factors, health care needs, and the comparative social benefits of different preventive strategies is greatly hampered without the two divining rods of incidence and prevalence.

Errors in epidemiologic principles and practices abound. Suggestive epidemiologic evidence is overinterpreted as epidemiologic lore. The introduction asserts that "rates of depression have increased in recent decades; depression is now being seen at younger ages and in greater frequency." If true, this finding has potentially profound implications for the allocation of public expenditures. Irrespective of the scientific calibre of the relatively small number of studies forming the basis of this assertion, a proper epidemiologic presentation of these results would have been heavily encumbered with methodological caveats. Apparent secular changes in disease rates are not to be accepted at face value, especially not until the possible role of recall bias, or secular changes in diagnostic procedures or criteria, have been discounted as the more likely explanations. Results from a handful of studies prompt efforts at replication, not claims of an established relationship. In other discussions, for example, on the possible association between epilepsy and psychiatric disorders, evidence from uncontrolled case series is given equal weight to that from epidemiologic studies that by design permit rather than preclude measures of association.

In recent years, several books have discussed selected mental health issues in a global context. *Amidst Peril and Pain: The Mental Health and Well-Being of the*

*World's Refugees* is a well-documented and closely reasoned discussion of the origins, scope, and nature of mental health problems in refugee populations worldwide. The *International Handbook of Traumatic Stress Syndromes*,<sup>2</sup> the single best work on this subject, includes systematic discussions of these syndromes in low-income populations. *World Mental Health* is less concerned than these other works with methodological issues, and its value thus is diminished. Nonetheless, *World Mental Health*, aimed at policymakers, legislators, ministers of health, health agency administrators, and scholars and

students in the health and social sciences, performs the invaluable service of alerting us to the myriad risk populations worldwide and to their enormous, underappreciated burden of psychiatric disorder and psychological distress.

At the June 1995 United Nations meeting announcing its publication, Secretary-General Boutros Boutros-Ghali declared that "this report puts the issue of mental health and well-being firmly on the international agenda." Hopefully, this position will be sustained by subsequent epidemiologic and anthropologic research, policy development, grass roots

programs, and political action at the international, national, and community level. □

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